L9 ANSWER 1 OF 25 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.DUPLICATE 1
ACCESSION NUMBER: 2001271117 EMBASE
TITLE: Calcitonin is a prostate epithelium-derived growth stimulatory peptide.
AUTHOR: Chien J.; Ren Y.; Yong Qing Wang; Bordelon W.; Thompson E.; Davis R.; Rayford W.; ***Shah G.***
CORPORATE SOURCE: G. Shah, Department of Pharmaceutical Sci., Texas Tech Univ. Health Sci. Center, Amarillo, TX 79106, United States. girish@cortex.ama.ttuhsc.edu
SOURCE: Molecular and Cellular Endocrinology, (5 Jul 2001) 181/1-2 (69-79).
Refs: 27
ISSN: 0303-7207 CODEN: MCEND6
PUBLISHER IDENT.: S 0303-7207(01)00530-5
COUNTRY: Ireland
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 003 Endocrinology
016 Cancer
022 Human Genetics
028 Urology and Nephrology
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English

AB Locally secreted growth factors and neuropeptides may play an important role in sustaining the growth of hormone-independent prostate ***cancer*** . Our previous studies have shown that calcitonin-like immunoreactive peptide (CTI) is secreted by primary prostate cells in culture, and its secretion from malignant prostate cells is significantly higher than benign cells. Exogenously added calcitonin (CT) induces DNA synthesis in serum-starved prostate ***cancer*** LNCaP and PC-3M cells. Present studies extended these findings by cloning cDNAs for CT and CT receptor (CT-R) from prostate ***cancer*** cells and studying the expression of CT and CT-R mRNA in prostate ***cancer*** cell lines and primary prostate ***tumor*** specimens. The results have shown that PC-3 cells expressed CT, and not CT-R, mRNA, whereas CT-R, but not CT, mRNA was expressed by LNCaP cells. Conditioned media from PC-3 cells induced DNA synthesis of LNCaP cells, and this mitogenic response was abolished by anti-CT serum. Highly aggressive PC-3M cells co-expressed CT and CT-R mRNAs. CT also induced a twofold increase in DNA synthesis of primary prostate cells and anti-CT serum caused a 56% decline. In-situ hybridization histochemistry of archival prostate specimens has selectively localized CT and CT-R mRNA in basal epithelium of benign and low grade PC specimens, and these mRNAs were not detected in either luminal epithelium or stroma. In contrast, CT and CT-R mRNA were detected throughout the luminal epithelium of moderate and high-grade PC specimens. Most epithelial cells of low and moderately differentiated tumors expressed either CT or CT-R mRNA, suggesting that CT may serve as a paracrine factor. In contrast, CT and CT-R mRNAs were co-expressed by most ***tumor*** cells in advanced PC specimens. The cells expressing CT-R mRNA in primary tumors also co-expressed PCNA. These results, when combined with mitogenic actions of CT on primary prostate cells as well as PC cell lines, strongly support the role for CT in sustaining the growth of ***cancer*** cells. .COPYRGT. 2001 Elsevier Science Ireland Ltd. All rights reserved.

L9 ANSWER 2 OF 25 MEDLINE DUPLICATE 2
ACCESSION NUMBER: 2001091089 MEDLINE
DOCUMENT NUMBER: 21024134 PubMed ID: 11149419

09251133

TITLE: Role of stimulatory guanine nucleotide binding protein (GSalpha) in proliferation of PC-3M prostate ***cancer*** cells.
AUTHOR: Chien J; ***Shah G V***
CORPORATE SOURCE: Department of Molecular and Integrative Physiology, The University of Kansas Medical Center, Kansas City, USA.
CONTRACT NUMBER: DK-45044 (NIDDK)
SOURCE: INTERNATIONAL JOURNAL OF CANCER, (2001 Jan 1) 91 (1) 46-54. Journal code: GQU. ISSN: 0020-7136.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200101
ENTRY DATE: Entered STN: 20010322
Last Updated on STN: 20010322
Entered Medline: 20010125

AB Previous studies have shown that calcitonin-like immunoreactive substances are secreted by primary prostate cells. Furthermore, exogenously added calcitonin stimulates proliferation of androgen-responsive LnCaP cells. To examine the possible effect of calcitonin on growth of invasive prostate ***cancer*** cells, we tested its effects on proliferation of PC-3M cells. Calcitonin stimulated DNA synthesis of PC-3M cells in a dose-dependent fashion, and also stimulated adenylyl cyclase and protein kinase C activities. To further delineate the role of these signaling cascades in proliferation of PC-3M prostate ***cancer*** cells, we selectively activated these pathways by transfecting cDNAs expressing constitutively active forms of either Gsalpha (Gsalpha-QL) or Gqalpha (Gqalpha-QL). cDNAs expressing wild-type forms of G-proteins (Gsalpha-WT and Gqalpha-WT) were used as vehicle controls. Gqalpha-QL transfectants exhibited growth inhibition and terminal differentiation. Those expressing Gsalpha-QL exhibited a dramatic increase in growth rate. Gsalpha-QL transfectants displayed an almost 3-fold increase in [3H]-thymidine incorporation and over a 4-fold increase in growth rate when compared with parental PC-3M cells or those expressing wild-type Gsalpha (Gsalpha-WT). The growth-promoting action of Gsalpha-QL could not be mimicked by either 8-bromo cAMP or forskolin. However, nifedipine, a calcium channel antagonist, potently and selectively inhibited DNA synthesis in Gsalpha-QL transfectants. These results suggest that the growth-promoting actions of Gsalpha on PC-3M cells may be mediated by nifedipine-sensitive proliferative events.

L9 ANSWER 3 OF 25 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 2000295696 EMBASE
TITLE: Expression of a novel transmembrane carbonic anhydrase isozyme XII in normal human gut and colorectal tumors.
AUTHOR: Kivela A.; Parkkila S.; Saarnio J.; Karttunen T.J.; Kivela J.; Parkkila A.-K.; Waheed A.; Sly W.S.; Grubb J.H.; ***Shah G.*** ; Tureci O.; Rajaniemi H.
CORPORATE SOURCE: Dr. A. Kivela, Dept. of Anat./Cell Biology, University of Oulu, Box 5000, FIN-90014 Oulu, Finland. kivelae@usa.net
SOURCE: American Journal of Pathology, (2000) 156/2 (577-584). Refs: 24
ISSN: 0002-9440 CODEN: AJPAA4
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 005 General Pathology and Pathological Anatomy
009 Surgery
016 Cancer

09251133

029 Clinical Biochemistry
048 Gastroenterology

LANGUAGE: English
SUMMARY LANGUAGE: English

AB Carbonic anhydrase isozyme XII is a recently discovered member of the .alpha.-carbonic anhydrase gene family with a suggested role in von Hippel-Lindau gene-mediated carcinogenesis. Increased expression of its mRNA has been observed in renal and lung carcinomas. This paper presents the localization of CA XII in the normal human gut and in colorectal tumors. Immunohistochemistry performed using a polyclonal antibody raised against truncated CA XII revealed prominent polarized staining for CA XII in the basolateral plasma membrane of the enterocytes of the normal large intestine, the reaction being most intense in the surface epithelial cuff region. Most colorectal tumors displayed abnormal expression of CA XII; the most dramatic change was observed in the deep parts of the adenomatous mucosa, where the positive immunoreaction clearly increased along with the grade of dysplasia. Adenomas with severe dysplasia and carcinomas showed an equal, diffuse staining pattern. The results indicate region-specific regulation of CA XII expression along the cranial-caudal axis of the human gut, whereas its diffuse expression in the most malignant tumors seems to correlate with their biological behavior.

L9 ANSWER 4 OF 25 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 2000030099 EMBASE
TITLE: Identification of carbonic anhydrase XII as the membrane isozyme expressed in the normal human endometrial epithelium.
AUTHOR: Karhumaa P.; Parkkila S.; Tureci O.; Waheed A.; Grubb J.H.; ***Shah G.*** ; Parkkila A.-K.; Kaunisto K.; Tapanainen J.; Sly W.S.; Rajaniemi H.
CORPORATE SOURCE: P. Karhumaa, Dept. of Anatomy and Cell Biology, University of Oulu, Box 5000, FIN-90401 Oulu, Finland
SOURCE: Molecular Human Reproduction, (2000) 6/1 (68-74).
Refs: 40
ISSN: 1360-9947 CODEN: MHREFD
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 010 Obstetrics and Gynecology
029 Clinical Biochemistry
LANGUAGE: English
SUMMARY LANGUAGE: English

AB Although previous studies demonstrated carbonic anhydrase (CA) activity in the human endometrium, the CA isozyme(s) responsible for this activity has not been established. In this report, we provide the first evidence that the CA isozyme XII, a recently identified transmembrane isozyme that is expressed in normal kidney and greatly overexpressed in some renal cancers, is present in endometrium. We show by immunohistochemistry that CA XII is expressed in the basolateral plasma membrane of epithelial cells of normal human endometrium. Expression of CA XII in uterus was confirmed by Northern blotting. Detergent-solubilized CA XII was isolated from human endometrium by inhibitor affinity chromatography and characterized by isoelectric focusing and Western blot as a polypeptide with a pI of 6.3. The high expression of CA XII in the endometrial epithelium suggests that it may be functionally linked to the pH-dependent events in spermatozoa that precede fertilization. Its basolateral location and extracellular active site could also allow it to influence the morphological changes in endometrium that occur during the menstrual cycle.

L9 ANSWER 5 OF 25 MEDLINE DUPLICATE 3

09251133

ACCESSION NUMBER: 1999289204 MEDLINE
DOCUMENT NUMBER: 99289204 PubMed ID: 10362358
TITLE: Constitutive activation of stimulatory guanine nucleotide binding protein (G(S)alphaQL)-mediated signaling increases invasiveness and tumorigenicity of PC-3M prostate ***cancer*** cells.
AUTHOR: Chien J; Wong E; Nikes E; Noble M J; Pantazis C G; ***Shah G V***
CORPORATE SOURCE: Department of Molecular and Integrative Physiology, University of Kansas Medical Center, Kansas City 66160, USA.
CONTRACT NUMBER: DK-45044 (NIDDK)
SOURCE: ONCOGENE, (1999 Jun 3) 18 (22) 3376-82.
Journal code: ONC; 8711562. ISSN: 0950-9232.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199906
ENTRY DATE: Entered STN: 19990714
Last Updated on STN: 20000303
Entered Medline: 19990628

AB An abnormal stimulation of cAMP signaling cascade has been implicated in various human carcinomas. Since the agents activating G(S)alpha-mediated signaling pathways have been shown to increase in vitro proliferation of prostate ***cancer*** cells, present studies examined the G(S)alpha-mediated signaling in tumorigenicity and invasiveness of PC-3M prostate ***cancer*** cells. PC-3M cells were stably transfected with plasmids containing either wild type (G(S)alpha-WT) or constitutively active (gsp mutant of G(S)alpha or G(S)alpha-QL) cDNAs. The stable transfectants were then tested for: (1) colony formation in soft agar; (2) cell migration and penetration of basement matrix in an in vitro invasion assay; and (3) the ability to form tumors and metastases in nude mice. PC-3M cells expressing G(S)alpha-QL protein displayed 15-fold increase in their ability to migrate and penetrate the basement membrane as compared to parental PC-3M cells or those expressing G(S)alpha-WT. G(S)alpha-QL transfectants also displayed a dramatically greater rate of growth in soft agar, and greater tumorigenicity and metastasis forming ability when orthotopically implanted in nude mice. All mice receiving PC-3M cells produced primary tumors within 5 weeks after implantation. However, the cells expressing G(S)alpha-QL displayed a significantly faster ***tumor*** growth as assessed by prostate weight (greater than 20-fold as compared to PC-3M cells), and produced metastases in kidneys, lymph nodes, blood vessels, bowel mesentery and intestine. Interestingly, expression of G(S)alpha-WT reduced the ability of PC-3M cells to form tumors in nude mice. These results suggest that persistent activation of G(S)alpha-mediated signaling cascade can dramatically accelerate tumorigenesis and metastasizing ability of prostate ***cancer*** cells.

L9 ANSWER 6 OF 25 MEDLINE
ACCESSION NUMBER: 97289631 MEDLINE
DOCUMENT NUMBER: 97289631 PubMed ID: 9144536
TITLE: Specific cleavage of the large subunit of replication factor C in apoptosis is mediated by CPP32-like protease.
AUTHOR: Song Q; Lu H; Zhang N; Luckow B; ***Shah G*** ; Poirier G; Lavin M
CORPORATE SOURCE: Queensland Institute of Medical Research, University of Queensland, P.O. Royal Brisbane Hospital, Australia..

09251133
qizhongS@qimr.edu.au
SOURCE: BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS, (1997 Apr 17) 233 (2) 343-8.
Journal code: 9Y8; 0372516. ISSN: 0006-291X.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199706
ENTRY DATE: Entered STN: 19970612
Last Updated on STN: 20000303
Entered Medline: 19970605

AB Recent evidence suggests that the growing family of cysteine proteases related to the interleukin-1beta-converting enzyme (ICE) is of central importance in mediating apoptosis. Proteolytic cleavage of a small group of cellular substrates by these enzymes in association with the onset of apoptosis has been reported. In the present study, we searched a protein data base for potential death substrates possessing the CPP32 cleavage site, DEVD, and identified several candidates including RFC140, the large subunit of replication factor C, which we subsequently demonstrated to be specifically cleaved in a variety of cell types undergoing apoptosis in response to different cytotoxic agents, whereas no degradation is observed in a cell line resistant to etoposide-induced apoptosis. The abrogation of RFC140 cleavage in apoptotic extracts by Ac-DEVD-CHO, a potent inhibitor of CPP32, together with the finding that a CPP32 consensus cleavage sequence, DEVD, exists in RFC140, suggests that CPP32 or a close relative is responsible for RFC140 degradation in apoptosis.

L9 ANSWER 7 OF 25 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1997:232133 BIOSIS
DOCUMENT NUMBER: PREV199799531336
TITLE: PC-3M cells transfected with a GTPase deficient Gs alpha mutant protein have increased invasive potential.
AUTHOR(S): Wong, E. C. C.; Chien, J.; Croughan, W.; Pantazis, C. G.; Noble, M. J.; ***Shah, G. V.***
CORPORATE SOURCE: Univ. Kansas Med. Cent., Kansas City, KS 66160 USA
SOURCE: Proceedings of the American Association for Cancer Research Annual Meeting, (1997) Vol. 38, No. 0, pp. 288.
Meeting Info.: Eighty-eighth Annual Meeting of the American Association for Cancer Research San Diego, California, USA April 12-16, 1997
ISSN: 0197-016X.
DOCUMENT TYPE: Conference; Abstract
LANGUAGE: English

L9 ANSWER 8 OF 25 MEDLINE DUPLICATE 4
ACCESSION NUMBER: 97247271 MEDLINE
DOCUMENT NUMBER: 97247271 PubMed ID: 9122040
TITLE: Muscarinic cholinergic receptors promote growth of human prostate ***cancer*** cells.
AUTHOR: Rayford W; Noble M J; Austenfeld M A; Weigel J; Mebust W K; ***Shah G V***
CORPORATE SOURCE: Department of Urologic Surgery, University of Kansas Medical Center, Kansas City 66160, USA.
CONTRACT NUMBER: DK 45044 (NIDDK)
SOURCE: PROSTATE, (1997 Feb 15) 30 (3) 160-6.
Journal code: PB4; 8101368. ISSN: 0270-4137.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199704
ENTRY DATE: Entered STN: 19970506
Last Updated on STN: 19970506
Entered Medline: 19970424

AB BACKGROUND: Recent evidence suggests that muscarinic receptors induce mitogenesis in cells capable of undergoing cell proliferation. Human prostate gland is innervated by the autonomic nervous system and muscarinic receptors have been localized in the prostate gland. METHODS: Effects of carbachol (a stable analog of acetyl choline) on DNA synthesis of LNCaP cells (a human prostate ***cancer*** cell line) and primary prostate cells was examined. The DNA synthesis in the cultured cells was assessed using techniques of 3H-thymidine incorporation and bromodeoxyuridine (BrdU) incorporation immunocytochemistry. RESULTS: Carbachol induced a significant increase in BrdU- and 3H-thymidine incorporation of LNCaP cells. The effect of carbachol was completely reversed by atropine, a selective muscarinic antagonist. Subtypes of muscarinic receptors mediating carbachol-induced DNA synthesis were identified using selective receptor subtype antagonists. Pirenzepamine and gallamine did not affect carbachol action on LNCaP cells but diphenylpyralamine, an M3 receptor antagonist, completely blocked carbachol-induced DNA synthesis. Carbachol also stimulated DNA synthesis in primary prostate cells. Prostate carcinoma (PC)-derived primary prostate cells displayed a dramatically greater response to carbachol (a ten-fold increase in DNA synthesis) as compared to benign prostate hypertrophy (BPH)-derived cells (a two-fold increase in DNA synthesis). CONCLUSIONS: M3 receptors stimulate the proliferation of LNCaP cells, BPH-derived and PC-derived primary prostate cells. A dramatically higher response to carbachol by PC-derived prostate cells suggests that M3 receptors may be up-regulated in PC. M3 receptors may play a significant role in PC tumors growth and androgen-independent ***tumor*** progression.

L9 ANSWER 9 OF 25 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1997:231139 BIOSIS
DOCUMENT NUMBER: PREV199799530342
TITLE: Constitutive activation of stimulatory GTP-binding (Gs) protein increases proliferation in PC-3M prostate ***cancer*** cells.
AUTHOR(S): Chien, J.; Nikes, E.; Pantazis, C. G.; Noble, M. J.; ***Shah, G. V.***
CORPORATE SOURCE: Univ. Kansas Medical Cent., Kansas City, KS 66160 USA
SOURCE: Proceedings of the American Association for Cancer Research Annual Meeting, (1997) Vol. 38, No. 0, pp. 140.
Meeting Info.: Eighty-eighth Annual Meeting of the American Association for Cancer Research San Diego, California, USA April 12-16, 1997
ISSN: 0197-016X.
DOCUMENT TYPE: Conference; Abstract
LANGUAGE: English

L9 ANSWER 10 OF 25 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.DUPLICATE 5
ACCESSION NUMBER: 95195608 EMBASE
DOCUMENT NUMBER: 1995195608
TITLE: Calcitonin inhibits prolactin gene transcription in rat pituitary cells.
AUTHOR: Xue-Zhang Q.; Stanley S.M.; ***Shah G.V.***
CORPORATE SOURCE: Dept. Urologic Surgery/Physiology, University of Kansas

09251133
Medical Center,Kansas City, KS 66160, United States
SOURCE: Endocrine, (1995) 3/6 (445-451).
ISSN: 0969-711X CODEN: EOCRE5
COUNTRY: United Kingdom
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 003 Endocrinology
029 Clinical Biochemistry
037 Drug Literature Index
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Our recent studies have shown that calcitonin (CD-like immunoreactive peptide is synthesized and released from cultured rat anterior pituitary (AT) cells, and may serve as a paracrine inhibitor of PRL release. The present studies investigated effects of CT on basal and TRH-induced PRL mRNA levels in rat AP and rat pituitary ***tumor*** CH, cells. CT attenuated steady-state PRL mRNA levels in a dose-dependent fashion in primary rat AP and CH, cells. The kinetics of CT action suggests that 100 nM CT caused a significant decline after 3 h, and the inhibition was sustained at least until the longest tested incubation period of 30 h. Results from nuclear run-on assays suggest that 100 nM CT decreased the rate of PRL gene transcription by 80% after 30 min of incubation. CT did not affect PRL mRNA levels in Gaze-depleted CH, cells but dramatically decreased them in Ca2+-repleted cells. Bay K 8644 induced increase in PRL mRNA levels of Ca2+-repleted CH, cells and CT did not affect this increase. These results suggest that CT rapidly and selectively inhibits PRL gene transcription in primary AP and CH, cells, and support a possibility that CT-induced attenuation of PRL mRNA may involve cytoplasmic Ca2+.

L9 ANSWER 11 OF 25 MEDLINE DUPLICATE 6
ACCESSION NUMBER: 1998435901 MEDLINE
DOCUMENT NUMBER: 98435901 PubMed ID: 9764872
TITLE: Pregnancy and its outcome in quadriplegia due to Pott's spine.
AUTHOR: Vaidya M K; ***Shah G V*** ; Bharucha K E
CORPORATE SOURCE: Department of Obstetrics and Gynaecology, B.J. Medical College and Sassoon General Hospitals, Pune, India.
SOURCE: INTERNATIONAL JOURNAL OF GYNAECOLOGY AND OBSTETRICS, (1995 Jun) 49 (3) 319-21.
Journal code: E4T; 0210174. ISSN: 0020-7292.
PUB. COUNTRY: Ireland
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199812
ENTRY DATE: Entered STN: 19990115
Last Updated on STN: 19990115
Entered Medline: 19981210
AB Pregnancy with quadriplegia is a problem sometimes encountered in obstetric practice. The etiology of quadriplegia in the developed world is mainly spinal cord ***tumor*** or accident, while in the developing countries the main cause is tuberculosis of the spine. We report the management of two pregnant patients with quadriplegia due to tuberculosis of the cervical spine. Worsening of the neurological condition necessitated early surgical intervention, and termination of pregnancy was advised in both patients. Literature on the subject makes frequent reference to the life-threatening complication of autonomic hyperreflexia encountered during pregnancy and delivery. It is characterized by sweating, headache, severe hypertension leading to unconsciousness and

convulsions. These complications, surprisingly, were absent in both of our patients.

L9 ANSWER 12 OF 25 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1995:185730 BIOSIS
DOCUMENT NUMBER: PREV199598200030
TITLE: Induction of telomeric associations (tas) and chromosomal aberrations (CAs) by estrogen in GH4 rat pituitary cell line.
AUTHOR(S): Banerjee, S. K. (1); Scott, S.; ***Shah, G.***
CORPORATE SOURCE: (1) Molecular Gastroenterol. and Pancreatic Cancer Res. Unit, V.A. Med. Cent., Kansas City, MO 64128 USA
SOURCE: Proceedings of the American Association for Cancer Research Annual Meeting, (1995) Vol. 36, No. 0, pp. 259.
Meeting Info.: Eighty-sixth Annual Meeting of the American Association for Cancer Research Toronto, Ontario, Canada March 18-22, 1995
ISSN: 0197-016X.
DOCUMENT TYPE: Conference
LANGUAGE: English

L9 ANSWER 13 OF 25 MEDLINE DUPLICATE 7
ACCESSION NUMBER: 94130802 MEDLINE
DOCUMENT NUMBER: 94130802 PubMed ID: 8299557
TITLE: Calcitonin stimulates growth of human prostate ***cancer*** cells through receptor-mediated increase in cyclic adenosine 3',5'-monophosphates and cytoplasmic Ca2+ transients.
AUTHOR: ***Shah G V*** ; Rayford W; Noble M J; Austenfeld M; Weigel J; Vamos S; Mebust W K
CORPORATE SOURCE: Department of Urologic Surgery, University of Kansas Medical Center, Kansas City 66103.
CONTRACT NUMBER: DK-45044 (NIDDK)
SOURCE: ENDOCRINOLOGY, (1994 Feb) 134 (2) 596-602.
Journal code: EGZ; 0375040. ISSN: 0013-7227.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Abridged Index Medicus Journals; Priority Journals
ENTRY MONTH: 199403
ENTRY DATE: Entered STN: 19940318
Last Updated on STN: 19970203
Entered Medline: 19940308

AB Our recent study has shown that a calcitonin (CT)-like immunoreactive substance(s) is secreted by cultured prostate cells, and secretion of this material is significantly higher in malignant than in benign prostate cells. To test the hypothesis that prostatic CT may serve as a paracrine/neuroendocrine factor, the present study investigated for the presence of CT receptors in the prostate gland. Signal transduction mechanisms activated by CT were examined, and the study also tested its effects on prostate cell proliferation, as assessed by [3H]thymidine incorporation. The results show that high affinity binding sites for [125I]salmon CT were present in plasma membrane fractions of human prostate tissue specimens and the prostate ***cancer*** LnCaP cell line. The maximal binding for CT receptors was 564 +/- 163 fmol/mg protein, and the apparent dissociation constant (Kd) was 2.89 +/- 0.58 nM. CT induced a dose-dependent increase in cAMP generation in LnCaP cells. The effect of CT on cytoplasmic Ca2+ transients of LnCaP cells was examined by videofluoromicroscopy. CT (100 nM) induced a rapid and sharp

increase in cytoplasmic Ca2+ concentrations in LnCaP cells. The CT-induced increase in cytoplasmic Ca2+ transients appeared to be biphasic (spike and plateau), and this increase was 4- to 10-fold during the initial phase. The profile of this response is characteristic of the activated Ca2+/phospholipid second messenger system. CT also caused a dose-dependent increase in [3H]thymidine incorporation by LnCaP cells. These results suggest that a locally secreted CT-like peptide(s) induces mitogenic responses in prostate ***cancer*** cells. This action seems to be mediated through activation of signaling mechanisms, leading to the accumulation of two different second messengers, cAMP and calcium. Activation of dual second messenger systems by CT receptors suggests that the peptide hormone may play an important role in rapidly growing cell populations during the process of ***tumor*** formation.

L9 ANSWER 14 OF 25 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1994:338180 BIOSIS
DOCUMENT NUMBER: PREV199497351180
TITLE: Muscarinic receptors may act as agonist-dependent oncogenes in human prostate ***cancer*** .
AUTHOR(S): Rayford, Walter; ***Shah, Girish V.*** ; Noble, Mark J.
CORPORATE SOURCE: Kansas City, KS USA
SOURCE: Journal of Urology, (1994) Vol. 151, No. 5 SUPPL., pp. 490A.
Meeting Info.: Eighty-ninth Annual Meeting of the American Urological Association San Francisco, California, USA May 14-19, 1994
ISSN: 0022-5347.
DOCUMENT TYPE: Conference
LANGUAGE: English

L9 ANSWER 15 OF 25 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1993:291300 BIOSIS
DOCUMENT NUMBER: PREV199345009425
TITLE: Calcitonin receptor affects intracellular cyclic-3',5'-monophosphate (cAMP) levels and increases cytoplasmic calcium concentrations in human prostate ***cancer*** cells.
AUTHOR(S): Rayford, Walter; ***Shah, Girish V.*** ; Frey, Benjamin J.; Noble, Mark J.; Austenfeld, Mark; Weigel, John; Mebust, Winston K.
CORPORATE SOURCE: Kansas City, KS USA
SOURCE: Journal of Urology, (1993) Vol. 149, No. 4 SUPPL., pp. 479A.
Meeting Info.: Eighty-eighth Annual Meeting of the AUA (American Urological Association) San Antonio, Texas, USA May 15-20, 1993
ISSN: 0022-5347.
DOCUMENT TYPE: Conference
LANGUAGE: English

L9 ANSWER 16 OF 25 MEDLINE DUPLICATE 8
ACCESSION NUMBER: 93105414 MEDLINE
DOCUMENT NUMBER: 93105414 PubMed ID: 8416748
TITLE: Mechanism of induction of c-fos by ultraviolet B (290-320 nm) in mouse JB6 epidermal cells.
AUTHOR: ***Shah G*** ; Ghosh R; Amstad P A; Cerutti P A
CORPORATE SOURCE: Department of Carcinogenesis, Swiss Institute for Experimental Cancer Research, Lausanne.
SOURCE: CANCER RESEARCH, (1993 Jan 1) 53 (1) 38-45.

09251133
Journal code: CNF; 2984705R. ISSN: 0008-5472.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199301
ENTRY DATE: Entered STN: 19930212
Last Updated on STN: 19930212
Entered Medline: 19930125

AB The UVB (290-320 nm) portion of the solar spectrum possesses the highest activity for the induction of skin ***cancer*** and has the capacity to stimulate epidermal proliferation. We report that UVB is a transcriptional inducer of the c-fos protooncogene in mouse JB6 epidermal cells. Induction is biphasic with an immediate early peak at 30-60 min and a second broader peak 8 h following irradiation. The immediate early phase is suppressed by inhibitors of nuclear adenosine diphosphoribose transferase. For UVB induction, the formation of full-length messages is less efficient than of early, short messages, while both types of messages are produced at similar rates following serum stimulation. Experiments with stable transfectants with reporter constructs linked to 5'-upstream sequences of c-fos indicate that UVB and serum stimulation both require the sequences from -345 to -285 which contain the joint DSE-AP-1 enhancer motifs for efficient induction. Mobility shift data reveal that the complement of c-Fos and c-Jun proteins which bind to the fos-AP-1 octanucleotide decrease immediately following irradiation. Increased binding of Fos and Jun is observed 8-24 h later. UVB did not cause an observable change in the nuclear proteins which bind to the dyad symmetry element oligonucleotide in vitro. Fos protein was detected among the binding proteins. We propose that the two phases of UVB-induced c-fos expression occur by quite different mechanisms. The immediate early phase is inhibited by adenosine diphosphoribose transferase inhibitors because poly-ADP ribosylation of chromosomal proteins is required for the resealing of UVB-induced DNA strand breaks which otherwise retard message elongation. The production of an autocrine factor may be responsible for the late phase of c-fos induction.

L9 ANSWER 17 OF 25 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 93049157 EMBASE
DOCUMENT NUMBER: 1993049157
TITLE: Chordomas mimicking epidural abscesses - MR findings. A report of two cases.
AUTHOR: Phadke P.P.; Shah V.; Doctor M.; ***Shah G.*** ; Desai S.
CORPORATE SOURCE: Breach Candy Hospital/Res. Centre, Magnetic Resonance Imaging Centre, 60 B Desai Road,Bombay 400 026, India
SOURCE: Indian Journal of Radiology and Imaging, (1992) 2/4 (255-258).
ISSN: 0970-2016 CODEN: IJRIES
COUNTRY: India
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 008 Neurology and Neurosurgery
014 Radiology
033 Orthopedic Surgery
LANGUAGE: English
SUMMARY LANGUAGE: English

L9 ANSWER 18 OF 25 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1993:1235 CAPLUS
DOCUMENT NUMBER: 118:1235

09251133

TITLE: Presence of calcitonin-like immunoreactivity (iCT) in human prostate gland: evidence for iCT secretion by cultured prostate cells

AUTHOR(S): ***Shah, Girish V.*** ; Noble, Mark J.; Austenfeld, Mark; Weigel, John; Deftos, L. J.; Mebust, Winston K.

CORPORATE SOURCE: Med. Cent., Univ. Kansas, Kansas City, KS, 66103, USA

SOURCE: Prostate (N. Y.) (1992), 21(2), 87-97
CODEN: PRSTDS; ISSN: 0270-4137

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Immunoreactive calcitonin (iCT) was secreted by primary prostatic cells in culture, and the basal secretion of iCT was higher with prostatic carcinoma cells than with cells from benign hyperplastic prostates. Prostatic calcitonin may be involved in the pathophysiol. of the prostate gland, and it could be a novel ***tumor*** marker for prostate ***cancer*** .

L9 ANSWER 19 OF 25 MEDLINE DUPLICATE 9

ACCESSION NUMBER: 91369945 MEDLINE

DOCUMENT NUMBER: 91369945 PubMed ID: 1654093

TITLE: The balance between Cu,Zn-superoxide dismutase and catalase affects the sensitivity of mouse epidermal cells to oxidative stress.

AUTHOR: Amstad P; Peskin A; ***Shah G*** ; Mirault M E; Moret R; Zbinden I; Cerutti P

CORPORATE SOURCE: Department of Carcinogenesis, Swiss Institute for Experimental Cancer Research, Lausanne.

SOURCE: BIOCHEMISTRY, (1991 Sep 24) 30 (38) 9305-13.
Journal code: A0G; 0370623. ISSN: 0006-2960.

PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199110

ENTRY DATE: Entered STN: 19911108
Last Updated on STN: 19911108
Entered Medline: 19911023

AB Oxidants are toxic, but at low doses they can stimulate rather than inhibit the growth of mammalian cells and play a role in the etiology of ***cancer*** and fibrosis. The effect of oxidants on cells is modulated by multiple interacting antioxidant defense systems. We have studied the individual roles and the interaction of Cu,Zn-superoxide dismutase (SOD) and catalase (CAT) in transfectants with human cDNAs of mouse epidermal cells JB6 clone 41. Since only moderate increases in these enzymes are physiologically meaningful, we chose the following five clones for in-depth characterization: CAT 4 and CAT 12 with 2.6-fold and 4.2-fold increased catalase activities, respectively, SOD 15 and SOD 3 with 2.3-fold and 3.6-fold increased Cu,Zn-SOD activities, respectively, and SOCAT 3 with a 3-fold higher catalase activity and 1.7-fold higher Cu,Zn-SOD activity than the parent JB6 clone 41. While the increases in enzyme activities were moderate, the human cDNAs were highly expressed in the transfectants. As demonstrated for the clone SOD 15, this discordance between message concentrations and enzyme activities may be due to the low stability of the human Cu,Zn-SOD mRNA in the mouse recipient cells. According to immunoblots the content of Mn-SOD was unaltered in the transfectants. While the activities of glutathione peroxidase were comparable in all strains, the concentrations of reduced glutathione (GSH) were significantly lower in SOD 3 and SOD 15. This decrease in GSH may reflect a chronic prooxidant state in these Cu,Zn-SOD

overproducers.(ABSTRACT TRUNCATED AT 250 WORDS)

L9 ANSWER 20 OF 25 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1991:379306 BIOSIS
DOCUMENT NUMBER: BR41:51696
TITLE: IN-VITRO CYTOTOXICITY STUDIES OF OXALIPLATIN IN HUMAN ***TUMOR*** CELL LINES.
AUTHOR(S): PENDYALA L; CREAVEN P J; ***SHAH G*** ; MOLNAR M V; GRANDJEAN E M
CORPORATE SOURCE: ROSWELL PARK CANCER INST., BUFFALO, N.Y. 14263.
SOURCE: PROCEEDINGS OF THE 82ND ANNUAL MEETING OF THE AMERICAN ASSOCIATION FOR CANCER RESEARCH, HOUSTON, TEXAS, USA, MAY 15-18, 1991. PROC AM ASSOC CANCER RES ANNU MEET, (1991) 32 (0), 410.
CODEN: PAMREA.
DOCUMENT TYPE: Conference
FILE SEGMENT: BR; OLD
LANGUAGE: English

L9 ANSWER 21 OF 25 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1990:392374 BIOSIS
DOCUMENT NUMBER: BR39:63335
TITLE: HIGH-AFFINITY BINDING SITES FOR TRANSFORMING GROWTH FACTOR ALPHA EVIDENCE FOR A VARIANT EPIDERMAL GROWTH FACTOR RECEPTOR.
AUTHOR(S): KORC M; ***SHAH G*** ; BARFF J
CORPORATE SOURCE: DEP. MED., BIOCHEM., UNIV. CALIF., IRVINE, CALIF.
SOURCE: NATIONAL MEETING OF THE AMERICAN FEDERATION FOR CLINICAL RESEARCH, WASHINGTON, D.C., USA, MAY 4-7, 1990. CLIN RES, (1990) 38 (2), 530A.
CODEN: CLREAS. ISSN: 0009-9279.
DOCUMENT TYPE: Conference
FILE SEGMENT: BR; OLD
LANGUAGE: English

L9 ANSWER 22 OF 25 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1991:107156 BIOSIS
DOCUMENT NUMBER: BR40:49976
TITLE: ***CANCER*** AND OXIDATIVE STRESS.
AUTHOR(S): CERUTTI P; PESKIN A; ***SHAH G*** ; AMSTAD P
CORPORATE SOURCE: DEP. CARCINOGENESIS, ISREC-1066 EPALINGES, SWITZ.
SOURCE: MEETING ON OXIDATIVE DAMAGE AND REPAIR HELD AT THE 5TH BIENNIAL MEETING OF THE INTERNATIONAL SOCIETY FOR FREE RADICAL RESEARCH, PASADENA, CALIFORNIA, USA, NOVEMBER 14-20, 1990. FREE RADICAL BIOL MED, (1990) 9 (SUPPL 1), 167.
CODEN: FRBMEH. ISSN: 0891-5849.
DOCUMENT TYPE: Conference
FILE SEGMENT: BR; OLD
LANGUAGE: English

L9 ANSWER 23 OF 25 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1990:168348 BIOSIS
DOCUMENT NUMBER: BR38:79136
TITLE: HIGH-AFFINTIY BINDING SITES FOR TRANSFORMING GROWTH FACTOR ALPHA CORRELATE WITH ATTENUATED TYROSINE PHOSPHORYLATION IN HUMAN PANCREATIC ***CANCER*** CELLS.
AUTHOR(S): ***SHAH G*** ; BARFF J; KORC M
CORPORATE SOURCE: DEP. MED., UNIV. CALIF., IRVINE, CALIF.

SOURCE: ANNUAL MEETING OF THE WESTERN SOCIETY FOR CLINICAL INVESTIGATION, CARMEL, CALIFORNIA, USA, FEBRUARY 6-9, 1990. CLIN RES, (1990) 38 (1), 149A.
CODEN: CLREAS. ISSN: 0009-9279.
DOCUMENT TYPE: Conference
FILE SEGMENT: BR; OLD
LANGUAGE: English

L9 ANSWER 24 OF 25 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 1985:290939 BIOSIS
DOCUMENT NUMBER: BA79:70935
TITLE: REVERSIBLE INHIBITION OF TESTICULAR FUNCTION BY A GONADOTROPIN HORMONE-RELEASING HORMONE ANTAGONIST IN MONKEYS MACACA-FASCICULARIS.
AUTHOR(S): WEINBAUER G F; SURMANN F J; AKHTAR F B; ***SHAH G V*** ; VICKERY B H; NIESCHLAG E
CORPORATE SOURCE: MAX PLANCK CLIN. RES. UNIT REPRODUCTIVE MED., STEINFURTER STR. 107, D-4400 MUENSTER, FRG.
SOURCE: FERTIL STERIL, (1984) 42 (6), 906-914.
CODEN: FESTAS. ISSN: 0015-0282.
FILE SEGMENT: BA; OLD
LANGUAGE: English
AB The potential of a gonadotropin-releasing hormone (GnRH) antagonist to inhibit reproductive functions in a male nonhuman primate (M. fascicularis) was evaluated. Continuous infusion of 2 mg/day of [N-Ac-D-Nal(2)1,D-pCl-Phe2,D-Trp3,D-hArg(Et2)6, D-Ala10]-GnRH (RS-68439) via osmotic minipumps for 9 wk caused immediate and sustained reduction of serum luteinizing hormone and testosterone concentrations, and led to azoospermia in 3 animals and to sperm counts < 5 .times. 10-6 in a fourth. Testicular histology showed severe atrophy of Leydig cells and tubules. The endocrine parameters returned to normal within 2 wk of termination of treatment. Seminiferous tubule function was restored 14-18 wk after treatment, as indicated by normal ejaculate parameters. Chronic GnRH antagonist treatment reversibly inhibited pituitary and testicular function in a nonhuman primate. GnRH antagonists may thus have a potential for clinical use in fertiltiy control and in treatment of androgen-dependent tumors.

L9 ANSWER 25 OF 25 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.DUPLICATE 10
ACCESSION NUMBER: 82223218 EMBASE
DOCUMENT NUMBER: 1982223218
TITLE: Thiosulfate pharmacokinetics in normal and anuric dogs.
AUTHOR: Braverman B.; Ivankovich A.D.; ***Shah G.***
CORPORATE SOURCE: Dep. Physiol., Loyola Univ. Med. Sch., Maywood, IL 60153, United States
SOURCE: Proceedings of the Society for Experimental Biology and Medicine, (1982) 170/3 (273-280).
CODEN: PSEBAA
COUNTRY: United States
DOCUMENT TYPE: Journal
FILE SEGMENT: 037 Drug Literature Index
030 Pharmacology
LANGUAGE: English
AB Cyanide (CN) toxicity has recently become increasingly a clinical problem with the greater use of Laetrile for ***cancer*** treatment and of sodium nitroprusside for blood pressure control. Sodium thiosulfate is an excellent antidote for CN toxicity but not all aspects of its pharmacokinetics have been adequately studied. Applying a specific thiosulfate assay, we measured endogenous thiosulfate, the response to CN

infusion, and disappearance after iv injection in normal and anuric dogs. Endogenous plasma concentration was approximately 1 mg/dl; the bile concentration was 15 times higher but biliary excretion accounted for less than 2%, compared to renal excretion. Cyanide infusion decreased endogenous plasma thiosulfate 33% before death. The fast component of the thiosulfate disappearance curve was similar, 3 min, after iv injection (150 mg/kg), while the second component was markedly prolonged in anuric dogs (239 min) compared to controls (47 min). Therefore, a constant infusion of thiosulfate would appear to be the best method of maintaining the high plasma concentration necessary for CN detoxification during the continuous administration or absorption of CN-producing compounds.

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(FILE 'HOME' ENTERED AT 16:37:58 ON 04 SEP 2001)

FILE 'MEDLINE, EMBASE, BIOSIS, CAPLUS' ENTERED AT 16:38:16 ON 04 SEP 2001

L1	457	S	NEUROENDOCRINE(3W)MARKER
L2	2709020	S	CANCER OR TUMOR OR TUMOUR
L3	897540	S	CARCINOMA
L4	279	S	L1 AND (L2 OR L3)
L5	161	DUP REM	L4 (118 DUPLICATES REMOVED)
L6	416	S	((SHAH G.V.) OR (SHAH G V) OR (SHAH, GIRISH V.) OR (SHAH, G.)
L7	0	S	L6 AND L1
L8	45	S	L6 AND L2
L9	25	DUP REM	L8 (20 DUPLICATES REMOVED)

L12 ANSWER 1 OF 10 BIOSIS COPYRIGHT 2001 BIOSIS
ACCESSION NUMBER: 2000:471585 BIOSIS
DOCUMENT NUMBER: PREV200000471585
TITLE: Glandular malignant peripheral nerve sheath ***tumor*** . An unusual case showing histologically malignant glands.
AUTHOR(S): Nagasaka, Tetsuro (1); Lai, Raymond; Sone, Michihiko; Nakashima, Tsutomu; Nakashima, Nobuo
CORPORATE SOURCE: (1) Division of Pathology, Nagoya University Hospital, Tsurumai-cho 65, Showa-ku, Nagoya, 466-8560 Japan
SOURCE: Archives of Pathology & Laboratory Medicine, (September, 2000) Vol. 124, No. 9, pp. 1364-1368. print.
ISSN: 0363-0153.
DOCUMENT TYPE: Article
LANGUAGE: English
SUMMARY LANGUAGE: English
AB In this report, we describe a highly unusual case of glandular malignant peripheral nerve sheath ***tumor*** presenting as a neck mass in a previously healthy 29-year-old man. Grossly, the ***tumor*** was found to arise from a swollen peripheral nerve trunk. The ***tumor*** was largely composed of spindle cells that demonstrated marked nuclear pleomorphism and numerous abnormal mitotic figures. In addition, histologically malignant glandular structures lined by simple nonciliated columnar cells with goblet cells were found clustered in the center of the ***tumor*** . Examination of the swollen peripheral nerve trunk revealed the presence of a plexiform neurofibroma. The spindle cells were positive

for S100. The glands were negative for S100 but positive for keratin, epithelial membrane antigen, and neuroendocrine markers (somatostatin, chromogranin, Leu-7, and ***calcitonin***). This patient was subsequently diagnosed as having von Recklinghausen disease and died of ***tumor*** metastasis to the lungs 34 months after the presentation. To our knowledge, only 3 similar cases have been previously described in the literature.

L12 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1999:374879 CAPLUS
DOCUMENT NUMBER: 131:142818
TITLE: Expression of neuropeptides and other neuroendocrine markers in human pheochromocytomas
AUTHOR(S): Moreno, A. M.; Castilla-Guerra, L.; Martinez-Torres, M. C.; Torres-Olivera, F.; Fernandez, E.; Galera-Davidson, H.
CORPORATE SOURCE: Department of Cytology and Histopathology, University of Seville, Spain
SOURCE: Neuropeptides (Edinburgh) (1999), 33(2), 159-163
CODEN: NRPPDD; ISSN: 0143-4179
PUBLISHER: Churchill Livingstone
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Phaeochromocytomas may produce several neuropeptides as they are considered neuroendocrine tumors. Nevertheless, studies are scarce and no clear predictive biol. value has been stablished in the case of neuropeptides expression. We have investigated immunohistochem. the neuropeptides expression of a series of 36 pheochromocytomas: 25 sporadic, seven familial type MEN (multiple endocrine neoplasm) and four familial pheochromocytomas not assocd. with MEN syndrome. The reactivity for neuron-specific enolase (NSE), synaptophysin, vasoactive intestinal peptide (VIP), chromogranin A, ***calcitonin*** , ACTH, somatostatin and HMB-45 was tested according to the avidin-biotin complex (ABC) method using polyclonal antibodies. Pheochromocytomas have a multiple synthetic activity as main neuroendocrine feature. Despite pheochromocytoma ***tumor*** cells heterogeneity chromogranin and synaptophysin are the most common neuropeptides synthesized, as they are assocd. with the presence of neuroendocrine storage granules. We find a statistically significant higher synthesis of corticotrophin hormone in familial pheochromocytomas than in sporadic forms, on the contrary the synthesis of VIP is statistically assocd. with sporadic forms of pheochromocytomas. We also found a direct relation of ACTH and overexpression and malignant tumors and a pos. relationship between NSE and benign forms of pheochromocytomas.

REFERENCE COUNT: 27
REFERENCE(S):
(2) Capella, C; Path Res Pract 1988, V183, P176 MEDLINE
(6) Hanna, F; J Endocrinol 1997, V152, P275 CAPLUS
(20) Rindi, G; Histochemistry 1986, V85, P19 CAPLUS
(22) Schmechel, D; Nature 1978, V276, P834 CAPLUS
(24) Syversen, U; Neuropeptides 1992, V22, P235 CAPLUS
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 3 OF 10 EMBASE COPYRIGHT 2001 ELSEVIER SCI. B.V.
ACCESSION NUMBER: 1999097430 EMBASE
TITLE: ***Tumor*** heterogeneity and neuroendocrine differentiation in non- small cell lung carcinomas: Investigation of their relation with ***tumor*** stage, p53 protein and PCNA expression.

09251133

AUTHOR: Sagol O.; Kargi A.; Ermete S.
CORPORATE SOURCE: O. Sagol, Department of Pathology, Faculty of Medicine, Dokuz Eylul University, Izmir, Turkey
SOURCE: Annals of Medical Sciences, (1999) 8/1 (14-21).
Refs: 49
ISSN: 1300-0683 CODEN: AMLSET
COUNTRY: Turkey
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 005 General Pathology and Pathological Anatomy
016 Cancer
LANGUAGE: English
SUMMARY LANGUAGE: English
AB Purpose: The biologic significance of ***tumour*** heterogeneity including neuroendocrine differentiation in non small cell lung carcinomas is not certain. The purpose of this study is to investigate whether there is any significant difference between non small cell carcinomas with and without ***tumour*** heterogeneity including neuroendocrine differentiation in terms of ***tumour*** stage, ***tumour*** suppressor gene alterations shown by p53 protein expression and proliferative activity shown by PCNA expression. Methods: Paraffin sections of 57 non small cell carcinomas were reviewed and microscopic ***tumour*** heterogeneity was evaluated. The sections were all stained with neuroendocrine markers including Neuron Specific Enolase, Chromogranin A, ***Calcitonin*** and Serotonin antibodies for the evaluation of neuroendocrine differentiation, with anti-PCNA antibody for the evaluation of the proliferative activity of tumours, and with p53 antibody for the detection of mutant nuclear p53 protein expression. Standard streptavidin biotin immunperoxidase method was used for immunohistochemical staining. Fifty seven cases were graded for cytoplasmic staining with NE markers on a scale of 0 (-), to 3 positive(+). Nuclear staining for p53 was semiquantitatively graded as follows: (-): no staining, 1+: 1-30% of cells stained, 2+: 30-70% of cells stained, 3+: 70% or more stained cells. Nuclear staining for PCNA was evaluated by counting 1000 ***tumour*** cells and graded as follows: 1+: 1-40% of cells stained, 2+: 40-75% of cells stained, 3+: 75% or more cells stained. Results: ***Tumour*** heterogeneity was found in 12% of non small cell lung carcinomas on routine sections. Tumours with and without heterogenous areas did not show statistically significant difference in terms of ***tumour*** stage, proliferative activity and p53 expression. five percent of 57 non-small cell carcinomas reacted with two neuroendocrine markers. 42% of cases were positive for only one ***neuroendocrine*** ***marker*** . There was no statistically significant difference between the cases which were negative and cases which were positive with 1 or 2 neuroendocrine markers, in terms of proliferative activity and p53 expression. Seventy-one percent of 57 non small cell carcinomas reacted with p53 antibody. Cases with p53 protein expression were not different from negative cases in terms of proliferative activity, neuroendocrine differentiation and ***tumour*** stage. All cases of non small cell carcinomas reacted with PCNA antibody with the mean staining index of 61.6%. PCNA staining indices did not show statistically significant difference between subtypes and ***tumour*** stages. Conclusion: A complete NE differention demonstrated by positivity for multiple NE markers similar to NE tumours is quite unusual. Heterogeneity and neuroendocrine differentiation in NSCLCs shown by light microscopy or by one or two NE marker positivity does not correlate with tumours stage which is the most valuable predictor of prognosis and with other factors like p53 and PCNA reactivity whose influence on prognosis is debatable.

L12 ANSWER 4 OF 10 MEDLINE DUPLICATE 1
ACCESSION NUMBER: 1998124181 MEDLINE
DOCUMENT NUMBER: 98124181 PubMed ID: 9464534
TITLE: Expression of v-Ha-ras driven by the ***calcitonin*** / ***calcitonin*** gene-related peptide promoter: a novel transgenic murine model for medullary thyroid ***carcinoma*** .
AUTHOR: Johnston D; Hatzis D; Sunday M E
CORPORATE SOURCE: Department of Pathology, Brigham and Women's Hospital, Children's Hospital and Harvard Medical School, Boston, Massachusetts 02115, USA.
CONTRACT NUMBER: NO1-HD02911 (NICHD)
RO1-HL44984 (NHLBI)
RO1-HL50045 (NHLBI)
SOURCE: ONCOGENE, (1998 Jan 15) 16 (2) 167-77.
Journal code: ONC; 8711562. ISSN: 0950-9232.
PUB. COUNTRY: ENGLAND: United Kingdom
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199802
ENTRY DATE: Entered STN: 19980226
Last Updated on STN: 19990129
Entered Medline: 19980219

AB v-Ha-ras has been demonstrated previously to induce neuroendocrine differentiation of medullary thyroid ***carcinoma*** (MTC, malignant C cell ***tumor***) cell lines. The potential role of ras mediated signaling in neuroendocrine cells in vivo has been investigated by expressing v-Ha-ras under control of the neural/neuroendocrine specific ***calcitonin*** / ***calcitonin*** gene-related peptide (CGRP) promoter. Five independent mouse lineages were derived following germ line insertion of the transgene. Four of the five lineages consistently express the transgene; neuroendocrine expression is found in three of the five lineages as both spliced and full length messages. Phenotypically, the mice expressing rascal have shortened lifespans primarily due to the high incidence of MTCs between 6 months to a year of age. C-cell hyperplasia is demonstrated in several mice in the absence of gross evidence of ***tumor*** formation. Histopathological and ultrastructural analyses demonstrate typical features of MTCs including prominent immunohistochemical staining for ***calcitonin*** and dense-core neurosecretory-type granules. In addition, four of 22 tumors co-express thyroglobulin (a non- ***neuroendocrine*** follicular epithelial cell ***marker***) and ***calcitonin*** (a ***neuroendocrine*** ***marker***) in a subset of the ***tumor*** cells. The rascal transgenic mouse provides a unique model for investigating the sequential pathogenesis of MTC and possibly also for elucidating the relationship between MTC and mixed medullary-follicular carcinomas.

L12 ANSWER 5 OF 10 EMBASE
ACCESSION NUMBER: 1998252813 EMBASE
TITLE: Evaluation and clinical value of neuroendocrine differentiation in human prostatic tumors.
AUTHOR: Cussenot O.; Villette J.-M.; Cochand-Priollet B.; Berthon P.
CORPORATE SOURCE: O. Cussenot, Department of Urologie, Hopital Saint Louis, 1, avenue Claude Vellefaux, 75475 Paris Cedex 10, France. o.cussenot@chu-stlouis.fr
SOURCE: Prostate, (1998) 36/SUPPL. 8 (43-51).
Refs: 55

09251133
ISSN: 0270-4137 CODEN: PRSTDS
COUNTRY: United States
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 005 General Pathology and Pathological Anatomy
016 Cancer
028 Urology and Nephrology
LANGUAGE: English
SUMMARY LANGUAGE: English
AB BACKGROUND. Prostate ***cancer*** , like other solid tumors, is a rather heterogeneous entity. More than 50% of all malignant prostatic tUmors contain neuroendocrine-like cells, which cannot be attributed to small cell prostatic ***carcinoma*** or carcinoid-like tumors, which represent only 1-2% of all prostatic malignancies. Several investigators have reported that histopathologic determination of neuroendocrine differentiation in prostate carcinomas may have prognostic implications, while others have not confirmed these results. However, on the basis of experimental data, neuroendocrine- like cells appear to be involved in the emergence of androgen-independent cells and could be a target for new prostate ***cancer*** therapeutic strategies. METHODS. The literature on the neuroendocrine phenotype of prostatic ***carcinoma*** is reviewed. This review summarizes most of the accumulated experimental and clinical data on the neuroendocrine phenotype in prostate ***cancer*** . We analyze the putative functions of neuroendocrine-like cells in prostate ***cancer*** progression and discuss the place of neuroendocrine phenotype biomarkers as diagnostic and prognostic factors in prostate ***cancer*** . RESULTS. The fact that focal, patchy and heterogeneous clusters of neuroendocrine- like cells are frequently identified in organ-confined prostatic ***carcinoma*** probably accounts for the various evaluations of the predictive value of neuroendocrine histological patterns for the clinical outcome at this stage of the disease. The amount of neuroendocrine cells required to produce a detectable elevation in plasma chromogranin A has not yet been determined, but it is correlated with the number of chromogranin A-positive neuroendocrine (NE) cells. Despite the obvious current limitations of the application of neuropeptides as a serological test, this overview will try to more accurately define the possible roles of specific neuropeptides as prostatic ***cancer*** markers in diagnostic and monitoring protocols. The plasma chromogranin A level, in comparison with neuron-specific enolase (NSE), chromogranin B (CBG), pancreastatin, or secretogranin levels, appears to be the most useful ***neuroendocrine*** ***marker*** for determination of neuroendocrine differentiation of advanced prostatic adenocarcinoma. CONCLUSIONS. Future studies on neuroendocrine should confirm whether neuroendocrine biomarkers, especially the chromogranin family of peptides, can be used as prostatic markers during the course of prostate ***cancer*** or for the selection of patients suitable for evaluation of new antineoplastic drugs known to be active against specific and aggressive subpopulations of ***tumor*** cells.

L12 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2001 ACS
ACCESSION NUMBER: 1997:282420 CAPLUS
DOCUMENT NUMBER: 127:3568
TITLE: Regulatory peptides and other neuroendocrine markers in medullary ***carcinoma*** of the thyroid
AUTHOR(S): Hanna, F. W. F.; Ardill, J. E. S.; Johnston, C. F.; Cunningham, R. T.; Curry, W. J.; Russell, C. F. J.; Buchanan, K. D.
CORPORATE SOURCE: Wellcome Res. Lab., Queen's Univ. of Belfast, Belfast, BT12 6BJ, UK

09251133

SOURCE: J. Endocrinol. (1997), 152(2), 275-281
CODEN: JOENAK; ISSN: 0022-0795
PUBLISHER: Journal of Endocrinology
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Medullary thyroid ***carcinoma*** (MTC) is an APUDoma (APUD refers to amine precursor uptake and decarboxylation) arising from the parafollicular cells. Diarrhea has been reported in some 30% of patients, variously attributed to excess prodn. of ***calcitonin*** (CT), serotonin (5-HT), vasoactive intestinal peptide (VIP) or other factors. The regulatory factors in MTC were examd. employing immunocytochem. and RIA to tumors and their exts. The patients were followed up for more than 15 yr. CT and ***calcitonin*** gene-related peptide were universally expressed in all the tumors. The neuroendocrine markers chromogranin A (and its fragments pancreastatin and WE-14), neuron-specific enolase, protein gene product 9.5 and carcino-embryonic antigen were found in the majority of MTCs and might be useful as immunocytochem. markers. 5-HT, substance P, neurokinin A, glucagon and VIP could not be detected, excluding them as candidates in the diarrhea of MTC.

L12 ANSWER 7 OF 10 MEDLINE DUPLICATE 2
ACCESSION NUMBER: 97064768 MEDLINE
DOCUMENT NUMBER: 97064768 PubMed ID: 8908318
TITLE: Serum ***calcitonin*** in small cell ***carcinoma*** of the prostate.
AUTHOR: Sim S J; Glassman A B; Ro J Y; Lee J J; Logothetis C J; Liu F J
CORPORATE SOURCE: Division of Laboratory Medicine, University of Texas M.D. Anderson Cancer Center, Houston 77030, USA.
SOURCE: ANNALS OF CLINICAL AND LABORATORY SCIENCE, (1996 Nov-Dec) 26 (6) 487-95.
Journal code: 532; 0410247. ISSN: 0091-7370.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199702
ENTRY DATE: Entered STN: 19970227
Last Updated on STN: 19970227
Entered Medline: 19970213

AB Small cell ***carcinoma*** (SCC) of the prostate is a rare and recently recognized subtype of prostate ***cancer*** . The neuroendocrine component of the prostate ***carcinoma*** is becoming more frequently detected in classic adenocarcinoma of the prostate. Clinically, these tumors represent a considerable portion of so called androgen independent prostatic carcinomas. It has been hypothesized that the neuroendocrine cells being admixed with adenocarcinoma is selected and emerges as a hormone refractory ***carcinoma*** after the androgen blockade. The SCC shows a spectrum from a mixed adenocarcinoma with SCC component to the extreme case of pure SCC. Characteristically, prostatic SCC shows low measurable serum level of traditional prostate ***tumor*** marker, prostatic specific antigen (PSA). Instead, SCC secretes several neural peptides and ***calcitonin*** (CT) is one of them. The usefulness of serum CT as a ***neuroendocrine*** ***marker*** was evaluated retrospectively in 16 patients with SCC of the prostate (5 pure SCCs and II combined adenocarcinoma and SCCs). The serum CT was measured by radioimmunoassay. In all the patients, serum CT level was measured after SCC was diagnosed histologically. All 16 patients presented with advanced ***tumor*** with extensive metastasis. Nine (56 percent) out

of 16 cases showed elevated serum CT (range 42 approximately 2,654 pg/ml) and chemically supported the diagnosis of SCC. Owing to the retrospective nature of the study, the serum CT was measured only once in most of the cases, and the value of monitoring the disease progress or the responsiveness to the chemotherapy could not be evaluated. Survival analysis by logrank test did not show statistically significant prognostic value of serum CT in SCCs of the prostate. However, patients with extremely high serum CT level tend to have poor survival. Future studies are needed for further evaluation of serum CT as a disease monitor and prognostic marker in SCC of the prostate. Serum CT may have a role as a ***tumor*** marker in the early diagnosis of SCC of the prostate, which often is not diagnosed until the advanced stage.

L12 ANSWER 8 OF 10 MEDLINE
ACCESSION NUMBER: 96421325 MEDLINE
DOCUMENT NUMBER: 96421325 PubMed ID: 8823994
TITLE: Two cases of duodenal gangliocytic paraganglioma: immunocytochemical characteristics.
AUTHOR: Watanabe K; Hasegawa H; Sakuma H; Tsuboi M; Ito S; Suzuki T
CORPORATE SOURCE: Department of Pathology II, Fukushima Medical College, Japan.
SOURCE: FUKUSHIMA JOURNAL OF MEDICAL SCIENCE, (1995 Dec) 41 (2) 141-52.
Journal code: F91; 0374626. ISSN: 0016-2590.
PUB. COUNTRY: Japan
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199611
ENTRY DATE: Entered STN: 19961219
Last Updated on STN: 19961219
Entered Medline: 19961106

AB Two cases of duodenal gangliocytic paraganglioma were studied by means of immunocytochemical methods using 41 kinds of antibodies. The tumors consisted of three histological types; carcinoid, ganglioneuroma and paraganglioma. Tumors of both cases exhibited immunoreactivity to at least one or as many as three of the following: ***calcitonin*** , ***calcitonin*** -gene related peptide, endocrine granule constituent, Leu7, neuropeptide Y and basic fibroblast growth factor. In addition, these tumors were also immunopositive for neuron specific enolase, S-100 protein, neurofilament protein, pancreatic polypeptide, chromogranin A, somatostatin, leuenkephalin, substance P and vasoactive intestinal peptide, as has been described in previous reports. In one case, ***tumor*** cells were immunopositive for adrenocorticotropin, bombesin, gastrin releasing peptide, myelin basic protein, ***neuroendocrine*** ***marker*** and tyrosine hydroxylase. Moreover, paraganglioma cells of tumors showed both argyrophilia and argentaffinity. These results suggest that duodenal gangliocytic paraganglioma may originate from embryonic neuroinsular complex.

L12 ANSWER 9 OF 10 MEDLINE DUPLICATE 3
ACCESSION NUMBER: 95045671 MEDLINE
DOCUMENT NUMBER: 95045671 PubMed ID: 7957326
TITLE: ***Calcitonin*** -secreting ovarian strumal carcinoid.
AUTHOR: Esik O; Nemeth G; Szepeshazi K
CORPORATE SOURCE: Department of Radiotherapy, National Institute of Oncology, Budapest, Hungary.
SOURCE: EUROPEAN JOURNAL OF GYNAECOLOGICAL ONCOLOGY, (1994) 15 (3) 211-6.

09251133
Journal code: ENA; 8100357. ISSN: 0392-2936.
PUB. COUNTRY: Italy
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199411
ENTRY DATE: Entered STN: 19950110
Last Updated on STN: 19950110
Entered Medline: 19941128

AB A 3-mm strumal carcinoid was found incidentally in a mature ovarian cystic teratoma of a 38-year-old woman followed up for more than 9 years. Although the thyroid component disclosed a typical normal light microscopic appearance, no thyroglobulin and thyroxine were detected immunohistochemically. Immunoreactive ***calcitonin*** was demonstrated within the ***tumour*** cells. The close relationship between functionally imperfect thyroid tissue and a ***neuroendocrine*** ***marker*** -secreting ***tumour*** seems to be concordant with the theory of the existence of a pluripotential stem cell capable of differentiating multidirectionally.

L12 ANSWER 10 OF 10 MEDLINE DUPLICATE 4
ACCESSION NUMBER: 86182528 MEDLINE
DOCUMENT NUMBER: 86182528 PubMed ID: 3008474
TITLE: Cytomorphology and marker expression of malignant neuroendocrine cells in pleural effusions.
AUTHOR: Banner B F; Warren W H; Gould V E
SOURCE: ACTA CYTOLOGICA, (1986 Mar-Apr) 30 (2) 99-104.
Journal code: 0LI; 0370307. ISSN: 0001-5547.
PUB. COUNTRY: United States
Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198604
ENTRY DATE: Entered STN: 19900321
Last Updated on STN: 19970203
Entered Medline: 19860428

AB Three cases of pulmonary neuroendocrine ***carcinoma*** with malignant pleural effusions were retrospectively studied to determine if cellular morphology and expression of neuroendocrine markers were the same in the fluid as in the solid milieu. In fluids, changes were noted in cell grouping, shape and cytoplasm. Neuroendocrine markers expressed in both solid and dispersed tumors were neuron-specific enolase (NSE) in all cases and leu-enkephalin in one case. Vasoactive intestinal polypeptide (two cases) and serotonin (one case) were detected only in the solid ***tumor*** . ACTH, bombesin and ***calcitonin*** were not expressed. We tentatively conclude that, in effusions, neoplastic neuroendocrine cells may alter their cytostructure, growth patterns and marker expression capabilities. NSE appears to be the most reliable ***neuroendocrine*** ***marker*** for use in small samples and with varying preparatory methods.

=> d his

(FILE 'HOME' ENTERED AT 16:37:58 ON 04 SEP 2001)

FILE 'MEDLINE, EMBASE, BIOSIS, CAPLUS' ENTERED AT 16:38:16 ON 04 SEP 2001
L1 457 S NEUROENDOCRINE(3W)MARKER

L2	2709020	S CANCER OR TUMOR OR TUMOUR
L3	897540	S CARCINOMA
L4	279	S L1 AND (L2 OR L3)
L5	161	DUP REM L4 (118 DUPLICATES REMOVED)
L6	416	S ((SHAH G.V.) OR (SHAH G V) OR (SHAH, GIRISH V.) OR (SHAH, G.)
L7	0	S L6 AND L1
L8	45	S L6 AND L2
L9	25	DUP REM L8 (20 DUPLICATES REMOVED)
L10	69446	S CALCITONIN
L11	19	S L10 AND L1 AND (L2 OR L3)
L12	10	DUP REM L11 (9 DUPLICATES REMOVED)